REMARKS

Applicants request reconsideration of their application in view of the foregoing amendment and the following remarks.

In the office action the claims were rejected as unclear on grounds that the nonconductive layer could not also be conductive. That was an erroneous interpretation of the claims. In order to prevent further erroneous interpretations, the claims are amended to make clear that the nonconductive, field spreading layer has small, conductive polymer particles dispersed throughout the layer in order to alter local electric fields between adjacent conductors. In addition, claims 11-17 are added. New claim 11 includes a functional limitation of nonconductive field spreading means to spreading an electrical field between the conductors.

The above amendment is made to clarify the scope of the claims and is not made to overcome the art of record. The invention has a unique nonconductive field spreading layer that is not shown or suggested by the art of record. The nonconductive field spreading layer has sub micron particles that are conductive polymers, in particular, polythiophene. The field spreading layer is an insulating layer that includes conductive particles. The conductive particles are insufficient to provide a conductive layer but they are nevertheless capable of influencing local electric fields that are proximate the conductors. Those particles alter the local electric fields in the nonconductive layer to bend the fields so that they influence the liquid crystal material. When so influenced, the liquid crystals have their states altered. In this way, the invention renders active the normally inactive regions of the liquid crystal layer and reduces backscattering.

Neither the structure nor the function of the claimed invention is shown or suggested by the art of record. Claim 1 was rejected based upon a combination of two references: Fukao (US 6211931) and Broer (US 20030038912 A1). Neither reference alone or in combination shows or suggests the invention.

Neither reference shows or suggests two layers, including a state changing layer and a filed spreading layer, between the spaced apart conductors. Each shows only one layer of liquid crystal material. One skilled in the art would at most be lead

to substitute the liquid crystal material of one for the other. The references do not suggest adding another, field speading layer between the conductors. Nor does either reference show or suggest spreading the electric field between conductors with an added layer.

Fukao has a monomer layer for providing mechanical adhesion of the liquid crystal layer to the substrate. However, there is no disclosure in Fukao of using conductive particles dispersed in a nonconductive layer for spreading an electric filed between adjacent conductors. The monomer layer of Fukao has no conductive particles.

Claim 2 is patentable over the art of record because no reference shows or suggests using the same polymer for the liquid crystals and for conductive particles.

Claim 3 is patentable over the art of record because no reference shows using gelatin to hold liquid crystals and conductive particles.

Claim 4 is patentable over the art of record because no reference simultaneously or sequentially deposits liquid crystal and conductive particle dispersed layers.

Claim 5 is patentable over the art of record because no reference shows a display sheet with first conductor layer and a field spreading layer where the two layers have substantially the same index of refraction.

Claim 6 is patentable over the art of record. It is correct that Broer in paragraph 0161 discloses using polythiophene, but Borer uses polythiophene as a layer to form conductors. Broer does not show or suggest dispersing particles of polythiophene in a nonconductive layer to spread the electric field between conductors. In Broer the top electrode 8b is made of polythiophene. Nowhere does Broer suggest dispersing particles of polythiophene in a nonconductive, field spreading layer.

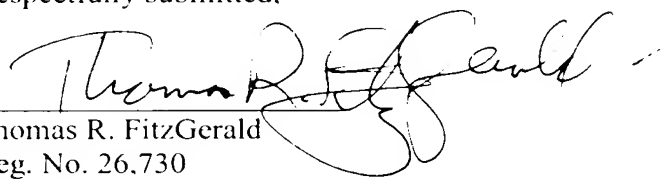
Claim 7 is patentable over the art of record for the same reasons given above for claim 1.

Claim 8 is patentable over the art of record for the same reasons as claims 1, 4 and 7.

Claims 9 and 10 are patentable over the art of record for the same reasons as claims 1 and 7.

Having thus distinguished the invention and the claims from the art of record, a notice of allowance is requested.

Respectfully submitted,



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